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“Insidious Pollen”: Toxicity and the Post-Pastoral in J.A. Baker’s *The Peregrine*

by Robert Newton



Abstract

This article discusses how J.A. Baker’s experimental nonfiction book *The Peregrine* (1967) responds to the dispersal of persistent toxic substances by distorting pastoral modes of expression. It also connects the text to contemporary literary and critical discussions of slow violence. I begin by historicizing *The Peregrine* in light of the politicized intersection of industrial toxicity and ecological science in 1960s Britain. I then consider how Baker braids many forms and genres, from field notation to science fiction, to represent troubling ecological alterations in 1960s Essex. An experimental and border-slipping text, drifting between disparate literary zones, *The Peregrine* restlessly unsettles certain expectations of the English landscape. Rural place, for the narrator of *The Peregrine*, does not offer any consolatory retreat from technological modernity. Rather, it confronts him with toxic residues generated by his society, with their lethal ecological activity, and with the prospect of their long-term persistence. This induces him to reckon with difficult questions of agency and responsibility, and to explore the narrative implications of a deep-time perspective. Responding to the destruction of the ecological conditions under which pastoral culture developed, Baker experimented with aesthetic modes and descriptive methods not usually associated with the literary evocation of nature.

Keywords: toxicity, post-pastoral, activism, nonfiction, slow violence, peregrine



About the Author

Robert Newton completed an environmental humanities Ph.D. at the University of Cambridge entitled “‘Insidious Pollen’: Literature and Industrial Toxicity, 1935–Present”. He currently works in the renewable energy sector.



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“Insidious Pollen”: Toxicity and the Post-Pastoral in J.A. Baker’s *The Peregrine*

Robert Newton

J.A. Baker’s 1967 experimental nonfiction book *The Peregrine* restlessly unsettles certain expectations of the English landscape. Its narrator moves through an intensively-farmed area of East Anglia, tracking peregrine falcons. Self-disgusted and elegiac in its moods, this book explores emergent relationships between human and nonhuman worlds: the narrator is aware that the falcons are undergoing chronic exposure to organochlorine insecticides, and believes that this condition, which renders them infertile, will soon result in their extinction. As it represents the ecological effects of newly ubiquitous toxic presences—not only agrichemicals, but also oil slicks and radionuclides—*The Peregrine* elides traditional conventions for describing rural England, such as the pastoral and the picturesque. For Baker, to reproduce such tropes while describing poisoned places and beings would be tantamount to an act of literary fraud, covering up the lethal effects of industrial intensification with a mendacious “lullaby language” (Baker 1972, 215). Baker recognized that the chemically altered, ecologically depleted landscapes of 1960s Essex required new strategies of literary description. In response, he synthesized heterogeneous forms and genres, such as field notation, science fiction, and elegy, into an experimental “toxic discourse” (Buell 1998). *The Peregrine*, I suggest in what follows, anticipates contemporary literary and critical writing about the Anthropocene, which often stresses the necessity of forming new descriptive repertoires for disorienting environmental changes.

The Peregrine is, as David Farrier summarizes, “a composite account of the ten years Baker spent stalking peregrines in his native Essex, told as a diary of a single migratory season” (Farrier 2015, 744). Early in the book the narrator describes his first sighting of a peregrine, and explains that he has since spent his winters “searching for that restless

brilliance, for the sudden passion and violence that peregrines flush from the sky” (Baker 1967, 30). The narrator’s fascination with peregrines reaches such votive intensity that he seeks to take on the qualities of a raptor himself, and to abscond from human life. As he declares at the close of his first diary entry:

Wherever he goes this winter, I will follow him. I will share the fear, and the exaltation, and the boredom, of the hunting life. I will follow him until my predatory human shape no longer darkens in terror the shaken kaleidoscope of colour that stains the deep fovea of his brilliant eye. My pagan head shall sink into the winter land, and there be purified. (1967, 51)

This passage radiates the forces of attraction and repulsion that animate the narrator’s obsession with peregrines: attraction, to “share” their visionary, untethered sensory experiences; and repulsion, from a social world blind to the harm it inflicts upon nonhuman creatures (1967, 51). The narrator is stricken by a debilitating sense of complicity with toxic industrial forces, which drives a powerful self-loathing: he repeatedly refers to a “human taint” (28) or “stink,” (126) and seeks to slough off his humanity “as the fox sloughs off his smell into the cold unworldliness of water” (28). His gnawing awareness of toxic activity, then, intensifies his “connective” ethical impulse to “align his appetites and attention with those of the bird” (Farrier 2015, 743–44). *The Peregrine* may be read as an early text in an international and evolving “poetic inquiry . . . into the ecological limits and crisis tendencies that come to characterize the Great Acceleration,” investigating the growing “indistinction of the anthropogenic and the nonhuman in a globalized age” (Ronda 2018, 9).

Over fifty years have elapsed since its publication, but *The Peregrine* exerts a persistent influence on contemporary British nonfiction about the living world. Numerous writers who reckon with the planetary legacies of industrial activity have acknowledged its importance for their work. Farrier has offered a detailed discussion of how Robert Macfarlane and Kathleen Jamie draw upon *The Peregrine*’s insistence on “interspecies connectivity” in a time of cascading extinctions (Farrier 2015, 747). Another contemporary nonfiction writer, Tim Dee, incorporates the text’s bleaker energies into his writing. In Dee’s 2014 book *Four Fields*—a meditation on fields as “site-specific, idiomatic and accented” (17) spaces—the narrator recalls a dark obsession with *The Peregrine* during his Cold War youth:

My favourite bird book of the time, J.A. Baker’s *The Peregrine*, was a toxic account of a sick and self-hating man stalking wintering falcons in coastal Essex . . . during the decade the species came close to global oblivion. Agricultural

insecticides, DDT and Dieldrin, were wracking the birds’ bodies with poison . . .
This, I thought, was how the world would end. (192–93)

Dee’s narrator invokes *The Peregrine* while recounting a visit to the exclusion zone around the exploded reactor at Chernobyl—a place where, as he writes “[p]asture is poisoned” (14). He reads *The Peregrine* as a “gothic” (193) text—an imaginative portal into a world thick with invisible toxicants, in which innocent experiences of nature are impossible. For Macfarlane, Jamie, and Dee, *The Peregrine* has guided thematic concerns that Terry Gifford associates with a “post-pastoral” mode—writing that does not seek “a stable, complacent form of harmony in the human relationship with nature,” but rather pursues “dynamic, self-adjusting accommodation” to destabilized ecologies (Gifford 2011, 28).

In this article, I investigate how Baker’s writing responds to the ecological and political dynamics of 1960s Britain, hoping to reach a richer understanding of his experimental representations of landscapes estranged by industrially-induced geochemical shifts. I also read *The Peregrine* in light of recent, transnational literary and critical work that maps the affective impacts of a “permanently polluted world” (Liboiron, Tironi, and Calvillo 2018, 332). In this way, I offer a granular account of *The Peregrine*’s contribution to 1960s conversations about toxicity, while expanding the text’s contemporary reading context, exploring what it offers not only to British nonfiction, but also to geographically diffuse discourses about chemical “slow violence” (Nixon 2011).

I begin with a brief contextual discussion of the politicization of industrial toxicity and ecological science in 1960s Britain. The 1962 publication of Rachel Carson’s *Silent Spring* set in motion a protracted international debate over the dangers of using synthetic pesticides in general, and organochlorine insecticides in particular. In Britain, this debate unfolded between ornithologists and environmental campaigners on the one side, who presented evidence that organochlorines were accumulating in ecosystems to lethal concentrations, and representatives of the agrichemical industry and certain government officials on the other, who sought to discredit or trivialize this evidence. In this contested atmosphere, the accurate perception and documentation of the living world acquired new political urgencies. Situating *The Peregrine* in this context, I argue that its literary experiments in observing and recording toxicity tend, understatedly but nonetheless firmly, towards activism.

I then consider how Baker braids forms and genres, from field notation to science fiction, to equip his readers to envisage troubling ecological alterations in 1960s Essex. Baker reckoned with the challenge of evoking new chemical entities that could endure across geological timescales; that exerted corrosive effects on the living world; and that

were invisible to the naked eye. Consequently, he explored the narrative implications of a deep-time perspective (drawing, I suggest, on 1960s science fiction), and he introduced apocalyptic literary registers into a nonfiction book about birds. *The Peregrine* investigates how to respond to the inadequacy, under toxic conditions, of pastoral modes of expression. For its narrator, rural place does not offer consolatory retreat from technological modernity. Rather, it confronts him with persistent toxic residues deposited by his society, and with their scorching deep-time legacies. This induces him to confront difficult questions of scale, agency and responsibility. As Carson had observed in 1962, humans and other beings were now living intimately with “chemical and physical agents that are not part of the biological experience of man” (Carson, 168). *The Peregrine* is not, at least explicitly, what Gifford calls an “anti-pastoral” text: Baker does not write in a corrective, polemical mode (Gifford 2013, 22). Rather, the text interleaves speculative, melancholic, and observational registers, conducting a multivalent enquiry into the cultural and psychic shocks triggered by finding oneself living in an irreversibly toxified world. In this way, I suggest as I close the article, *The Peregrine* anticipates a growing body of work on toxicity that investigates pollution as a source of some of the dominant moods of the contemporary: exhaustion, intransigence, uncertainty. Baker asked how the emergent ecological conditions of 1960s Britain exerted new pressures on pastoral culture. He also considered how, in order to accurately depict these conditions, writers might draw upon alternative aesthetic modes and descriptive methods, not usually associated with literature about nature.

“Honest Observation”: Toxicity, Ecology and Politics in 1960s Britain

The 1960s were a time of global agricultural transformation, sometimes called the “Green Revolution.” In his essay “Periodizing the 60s,” Fredric Jameson (1984) suggests that this decade, “often imagined as a period in which capital and first world power are in retreat all over the globe, can just as easily be conceptualized as a period in which capital is in full dynamic and innovative expansion, equipped with a whole armature of fresh production techniques and new ‘means of production’” (186). In agriculture, these included “new applications of chemical procedures to fertilization,” “intensified strategies of mechanization,” and the systematic use of synthetic pesticides (1984, 185–86). These industrial techniques, which remain in widespread use, have had profound social and ecological effects, rapidly increasing food production, annually pumping tens of millions of tons of fertilizers into seas, and driving major declines in insect populations (Davies 2016, 34–35; Sánchez-Bayo and Wyckhuys 2019, 20–21). Some 1960s researchers and writers, most famously Carson in *Silent Spring*, observed these alterations at an early

phase. When published in Britain in 1963, *Silent Spring* found “fertile ground” for toxic anxiety (Clark 2017, 307). Agricultural intensification had prompted a “growing post-Second World War criticism of technocracy’s negative impact on the English environment” (Clark 2017, 303). Unease around the “changes that had taken place [in] the British landscape as a result of the move to intensification” (Sayer 2013, 474) coincided and intermingled with widespread shock at disastrous pollution events, such as the 1967 Torrey Canyon oil spill, the terror of nuclear apocalypse, and worries about fallout. New fears, political identities, and narrative tropes coalesced. Throughout the 1960s, antitoxic exposés and environmentalist jeremiads proliferated, while nonfiction writing about the living world acquired new political dimensions.

Baker’s negotiation of the pastoral is inherently politicized, interacting with a contested discourse about the nature and importance of agrichemical toxicity in 1960s Britain. Writing in 1980, the ornithologist Derek Ratcliffe recalled how during the 1960s, toxicity invested the scientific work of observing and recording ecological phenomena with new political meaning. Following two international conferences on the ecological effects of pesticides in 1965, scientists launched campaigns for greater legal restrictions on organochlorines (Ratcliffe 1980, 352–53). In 1969, the British government’s Advisory Committee on Pesticides and other Toxic Chemicals reviewed the evidence presented by the campaigners and recommended stronger restrictions (1980, 334). While thoroughgoing organochlorine bans were not implemented until the early 1980s, this course of action nonetheless contributed to the eventual (and ongoing) recovery of British peregrine populations (1980, 334–40; Macfarlane 2017, 207–9). Ratcliffe describes the years preceding the Advisory Committee’s decision: it “was not an easy time. Some of us had our first experience of scientists playing politics, and we learned how vicious a vested interest under pressure can be.” The agri-business lobby demonstrated no “great desire to establish the real truth of the matter,” but rather sought to “find evidence to support their own case,” adopting “delaying tactics” and “covering up . . . unpalatable facts” (Ratcliffe 1980, 353–54). The increasing use of pesticides in Britain had created substantial income for agrichemical industries. In 1967, annual expenditure on pesticides was estimated at fifteen million pounds (Mellanby 1967, 189), worth roughly three hundred and thirty million today. In this context, to accurately observe that predatory birds were being subjected to lethal contamination by organochlorines—chemicals that Carson had recently described as potential carcinogens for humans—took on considerable political and industrial significance (see Carson 1962, 198–99). Should the Advisory Committee endorse the work of Ratcliffe and his colleagues and advocate more restrictive controls on organochlorines, substantial flows of capital might be stemmed and diverted. The “pesticide apologists” responded by seeking to warp or conceal

empirical data to suit their economic purposes (Ratcliffe 1980, 354). They developed “strategies of corporate obfuscation” that are now a familiar “part of the playbook for other industries sued for damages associated with their products: asbestos, oil, silica, tobacco, and most recently opioid pharmaceuticals” (Beller 2019).

As “scientists playing politics,” Ratcliffe and his fellow campaigners engaged in an early skirmish of what Bruno Latour (2017, 9, 27) calls the “war”: an ongoing conflict in which powerful institutions, spooked by the possible political implications of data showing that they produce harmful environmental mutations, respond with misinformation, calling upon a “whole panoply of communicators, paid experts, and even academics above suspicion” (Ratcliffe 1980, 353). Ratcliffe was alarmed that throughout the campaign for greater legal controls on pesticides,

Tactics at times resembled those of the courtroom rather than the scientific debating chamber and “smear technique” was openly used. There were tedious arguments about the nature of proof . . . attempts to deny effects of pesticides on wild raptors descended now and then into obscurantism . . . Some of the pesticide protagonists actually said that because it was “only wildlife” set against pressing human needs, the acceptable level of proof of cause and effect had to be of an altogether higher order than in a more neutral scientific issue. (353–54)

The agri-business lobby registered that in such a case, the “*description* of the facts is so dangerously close to the *prescription* of a policy that, to put a stop to the challenges addressed to the industrial way of life, one has to cast doubt on the facts themselves” (Latour 2017, 25). This episode (which recalls similar, though more vicious, industry attacks on *Silent Spring*) vividly illustrates the changing political philosophy of science in Britain during the 1960s. By observing and publicly reporting the toxification of ecosystems, one engaged in a politically charged act.

The documentary literary style that Baker developed in *The Peregrine* has a strongly forensic quality. Tracking falcons, the narrator repeatedly uncovers evidence of toxic activity. Importantly though, he does not construct a case against certain responsible parties. Rather, he compulsively reinforces his sense of his own shameful complicity. *The Peregrine* is a speculative enquiry into how as toxicants disperse and species die out, new imaginative complexes form. Through a literary method predicated on “honest observation,” both of ecological activity and of his own “emotions and behaviour,” the narrator records an open-ended process of psychic adjustment to his destabilized surroundings (Baker 1967, 32). *The Peregrine*, then, is not an investigative polemic in the vein of *Silent Spring*. Rather, Baker explores how ecological trauma induces despair or paralysis. And yet, *The Peregrine* is not without its political energies. Baker intersperses

his narrator’s account of his devotional pursuit of falcons with visceral details of what poisons do once they enter into ecosystems: “bright yellow foam bubbling from its throat;” “eyes were open and living, the rest of it was dead” (Baker 1967, 126). At such moments the text demands unyielding imaginative attention to toxic phenomena, inducing its readers to reflect on ecological mutations and, more tacitly, their implication in the industrial systems driving these mutations. To reiterate Latour’s insight into the politicization of accurate perception and documentation in the Anthropocene, here the “description of the facts is . . . close to the *prescription* of a policy” (Latour 2017, 25).

The Limits of the Pastoral: Deep Time, Toxic Dispersal, and Nuclear Terror in *The Peregrine*

The narrator of *The Peregrine* travels through the scoured landscapes of intensive agriculture, describes unsettling encounters with poisoned animals, and attends closely to his emotional and imaginative responses to these incidents. The sedimentation of such episodes, and of other direct and indirect allusions to toxicity, comes to influence the text’s sense of body and landscape. A peregrine can “take up and accumulate pesticide residues” over time; *The Peregrine* is similarly invested with a sense of chronic ecological harm through its narrator’s slow and ongoing exposure to toxic phenomena (Ratcliffe 1963, 76). Baker represents how toxicity is “manifested in the field of perception,” fostering knowledge of contamination through a gradually unfurling pattern of revelation and intimation (Benjamin 1968, 173). *The Peregrine* hereby prompts its readers to suspect—to expect—unseen poisons in fields and birds. At times, the narrator mentions toxicants overtly (“the filthy, insidious pollen of farm chemicals” [1967, 42]), but for the most part he indicates them obliquely, so that they haunt the text as one of several possible causes for its withered landscapes (“nothing moved in the silent valley” [105]; “there was a bitter silence, a slow dying” [137]). Such half-allusions, which accommodate the potential activity of alternative killers, such as cold, accumulate slowly and disquietingly, rendering toxicity perceptible as always possible, but rarely certain.

Baker recognized that describing newly entangled ecosystems and industrial infrastructures would require a new way of writing—old landscape conventions, such as the sublime or the picturesque, were inadequate. Peregrines had resided on Earth for epochs, but now, like many other beings, they faced rapid extinction. Landscapes once “flaming with hawks and finches” (Baker 1967, 154) were being sown with persistent, virulent synthetic substances that would eradicate ancient ecosystems, and endure as an “ineffaceable imprint” (Baker 1972, 215). In this context, to write about peregrines was to write about toxicity; and in order fully to describe the ecological effects of toxicants,

it was necessary to think in deep temporal scales, opening “into the future as well as the past” (Macfarlane 2019, 15). Once, to think with such scales would have been to feel human agency dwindle into insignificance, but now various industrial activities were burning an unfamiliar bright line through planetary history—a line separating a biodiverse past from a geochemically altered, ecologically harrowed future. Established ways of thinking and writing about nature were ill-equipped to attest to emergent systems, presences and deletions. Baker’s subject matter brought *The Peregrine* close to the terrain of science nonfiction and science fiction. Baker combines tropes from these genres with techniques borrowed from an array of literary forms, such as the field note or the imagist poem, to create an experimental and generically hybrid work which perceives British rural landscapes in unfamiliar, often startling ways. British cultures of landscape have long been highly coded—from the eighteenth century cult of the picturesque, adherents of which sought to define, exhaustively, the “prerequisites of a truly picturesque view,” to Baker’s contemporaneous birdwatching societies, which often had rigid observational and archival conventions (Thompson; see MacDonald 2002, 60–64). *The Peregrine* is itself a compulsive text, following intricate procedures and sequences (and drawing, as Sean Nixon has traced, upon “the observational and recording practices of the ‘new ornithology’” [2017, 215]). However, the cumulative effect of this systematicity is to unsettle, rather than situate, readers in place and time; the text refuses any stable aesthetic vantage on its landscapes. Baker repeatedly establishes unusual homologies between coastal Essex and distant geographies, extending even to planets: the narrator notes that herring gulls “in snow were calm as camels in the desert” (1967, 134); he patrols a “dying world, like Mars, but glowing still” (32). He also explores continuities and discontinuities between the present, and other ages and epochs, recalling how certain contemporary writers strive to “reimagine human and nonhuman life outside the confines of the Holocene” (Davies 2016, 209). A “serrated prehistoric grin” (1967, 98) snarls into the twentieth century through the skull of a merganser; the narrator anticipates outliving the peregrine “as the gibbering ape outlived the dinosaur” (133). In a 2019 article, Alexis Wright describes an Anthropocene event:

another massive pyroconvection producing bushfire—a super cell thunderstorm that was perhaps similar to the cumulonimbus flammagenitus clouds associated with the 2003 Canberra bushfire . . . This is the new language of climate change.

Wright observes that while “most of us have never heard” these words before, “we are now learning to understand from experiencing the extreme weather events affecting us more frequently.” *The Peregrine* was written at an earlier stage of this grim learning curve, but like Wright, Baker apprehended the need for a “new language” to describe induced geosystemic mutations and their psychic effects (Wright 2019).

Fenland, writes the narrator, is “withdrawn, remote, deep sunk in silence” (1967, 149). Baker’s writerly persona in his 1972 essay “On the Essex Coast” describes the silence of the Essex marshes as a sedimentary phenomenon, forming over deep spans of time: it “seems to have been sinking slowly down through the sky for numberless centuries, like the slow fall of the chalk through the clear Cretaceous sea. It has settled deep” (212). Throughout *The Peregrine*, landscapes are similarly presented as sites of ongoing, long-term processes of erosion, decay, and accumulation. Baker seeks to convey that, as Lauret Savoy (2015, 16) puts it, what “one might perceive as timeless is but one frame of an endless geologic film.” Even snow is “Neolithic, eroded by the warm south wind. Snow tumuli crumble where the great drifts rose against the sky” (Baker 1967, 146); hills “unwind their long horizons, and the land surfs up into limestone and hangs like a frozen wave of green” (121). Biological phenomena, too, offer glimpses of the deep past’s latency in the present. The narrator perceives the “prehistoric” (98) merganser as an aggregation of evolutionary metamorphoses, relations and traces. He also imagines a “Jurassic saurian, fetid and inert in a swamp,” (56) lurking in fog, and compares lesser spotted woodpeckers with “strange primeval butterflies clinging to a huge tree fern in a steamy prehistoric jungle,” one clamps onto a willow “as though his large feet were disced with suckers” (184–85). At such moments, Baker is not seeking to indicate exact evolutionary links. Rather, he draws upon science nonfiction and science fiction to situate *The Peregrine* within an epochal imaginary. The text hereby exceeds what the narrator calls “the grey and shrunken time of towns,” adopting an expansive temporal scale through which it seeks to convey interlinked nonhuman agencies, and their intricate patterns of influence and relation (31). Here, inhuman agents possess narrative import; past geological periods obtrude in the present.

Baker’s experiments with deep time recall the work of J.G. Ballard, of whom he was evidently an avid reader: he possessed no less than ten of Ballard’s books, including *The Drowned World* (1962), which takes place in a “radically new environment, with its own internal landscape and logic, where old categories of thought would merely be an encumbrance” (Ballard 1962, 14). Here, Ballard imagines London engulfed in a resurgent Triassic swamp, thickly populated by reptiles with “ancient impassive faces” (18). Characters undergo a “terrestrial and psychic” (74) “descent into deep time” (70). Perhaps Baker drew upon Ballard’s novel for the above descriptions of “Jurassic” and “primeval” landscapes, and in his own attempts to develop new “categories of thought” for a “radically new environment.” Baker also owned a copy of *Empire of the Sun*, Ballard’s autobiographical novel about the dawn of the nuclear age. This brings us to another striation in Baker’s accretive imagination: his literary attention to the emergent geological deposits and evolutionary influences of his own kind, through which he seeks

to “extend the temporal horizons of our gaze not just retrospectively but prospectively as well” (Nixon 2011, 62).

Baker wrote during the Cold War, a time of ambient nuclear threat; he describes intensive agricultural terrain, sown with persistent toxicants, in the grip of a bitter winter. His landscapes are stark and barren: “A dead tree in dark fields reflected light, like an ivory bone. Bare trees stood in the earth, like the glowing veins of withered leaves” (1967, 104). The narrator here observes and records a frozen arable zone, but this irradiated image might also be construed as a foreboding of nuclear aftermath. Baker often uses this imagistic technique, through which descriptions of his contemporary agricultural landscapes suggest the outcome of an apocalyptic toxic event. The narrator describes “just a curve of the earth, a rawness of winter fields. Dim, flat, desolate lands that cauterise all sorrow” (28); he reports that the “sun fired the bone-white coral of the frosted hedges with a cold and sullen glow. Nothing moved in the silent valley” (105); there “was a bitter silence, a slow dying. Everything sank down to the frozen edge of the grey lunar sea” (137). Such images hesitate between testimony, prophecy, and metaphor, investing *The Peregrine* with a speculative register. Like Baker’s invocations of deep, inhuman temporalities, they also displace the English rural landscape from its customary aesthetic categories. Hedges are coral; the sea is lunar; by compelling alternative perceptions of coded land, Baker administers a “jolt to the imagination” (Macfarlane 2016). In 1964, the animal rights activist Ruth Harrison suggested that British farming was “still associated with mental pictures of . . . cows waiting patiently in picturesque farmyards for the milking”—a bucolic and lucrative “association of ideas,” “cleverly kept alive” by the advertising industry on behalf of agri-business (Harrison 1964, 2). We might draw Harrison’s observation into relation with contemporary discussions of shifting baseline syndrome—a sociological and psychological condition through which “accepted thresholds for environmental conditions are continually . . . lowered” as “members of each new generation accept the situation in which they were raised as being normal” (Soga and Gaston 2018, 222). By adopting a radically experimental landscape aesthetic, Baker refuses any such conditioned complacency, subjecting readers to an “optic that might allow us to see—and foresee—the lineaments of slow terror behind the façade” of entrenched aesthetic conventions (Nixon 2011, 62). Sometimes, the narrator even seems to speak from a near future of absolute biological depletion. As though elegizing a species already extinct, he writes that the “frail bones of generations of sparrowhawks are sifting down now into the deep humus . . . when they died they could not be replaced” (1967, 29). Baker, then, turns his attention to some of the geological and ecological legacies conferred by twentieth century industrial society: persistent synthetic toxicants and extinction events. However, while the text seethes with invisible

toxic phenomena—inferred in the present, predicted in the future—it only rarely names toxicity. Occasionally, the narrator senses toxicants directly, as when he smells “damp grass, fresh soil, and farm chemicals” (186). More often though, he only hints at their presence, as when the “air was heavy and sweet-smelling, borne in the wind like pollen” (171). There is a verbal trace here of the earlier denunciation of the “filthy, insidious pollen of farm chemicals,” but the reader is kept uncertain as to the precise source of the smell (32). Toxicity is thus admitted into the text as a suspicion; as the object of a reasonable paranoia.

Ralph Lutts writes that in *Silent Spring*, Carson was,

sounding an alarm about a kind of pollution that was invisible to the senses; could be transported great distances, perhaps globally; could accumulate over time in body tissues; could produce chronic, as well as acute, poisoning; and could result in cancer, birth defects, and genetic mutations that may not become evident until years or decades after exposure . . . Chemical pesticides were not the only form of pollution fitting this description. Another form, far better known to the public at the time, was radioactive fallout. (Lutts 2000, 19)

Lutts suggests that readers of *Silent Spring* “throughout the world were prepared, or preeducated, to understand the basic concepts underlying” the text by a “decade-long debate over radioactive fallout preceding it” (Lutts 2000, 19–20). Carson registered that pesticides “could be understood as another form of fallout,” (Lutts 2000, 19) and encouraged associations between the toxicants: she writes that “the parallel between chemicals and radiation is exact and inescapable” (1962, 185). Baker, perhaps drawing on *Silent Spring*, likewise explores continuities between pesticides and radionuclides.

In the 1960s (as today), it was reasonable to be paranoid about fallout. Regular nuclear explosions (in 1962 alone, the USA detonated ninety devices) sent radioactive debris into the upper atmosphere, where it circulated in aerial currents (Lutts 2000, 31); it “could blow in any direction, take decades or generations to register” (Solnit 1994, 96). In this way, what Carson (1962, 186) called “the grey rains of fallout” spread across the planet—though deposits were (and remain) particularly concentrated in the vicinity of test sites. Just as the narrator of *The Peregrine* often suspects, but only sometimes unequivocally detects, the action of agricultural toxicants, so too does he hint at, without definitively identifying, the presence of radioactive ash. Baker hereby reflects aesthetically on how the perception of landscape may be inflected by an anxious awareness of nuclear operations. Light behaves in fearful ways—it may “flake and burn down to the west in a cold mercurial glow. There is suddenly a feeling of ‘too late’” (1967, 120); clouds are “bone-white in ashes of sky” (82). By having his narrator allude ambiguously to radioactive residues, Baker raises the specter of nuclear war. The narrator

is not only paranoid about unseen toxic presences, but also experiences forebodings of detonation events. Some descriptions of wintry landscapes evoke this particular sense of “overshadowing doom” (Lutts 2000, 33):

The sky peeled white in the north-west gale, leaving the eye no refuge from the sun’s cold glare. Distance was blown away . . . New horizons stood up bleached and stark, plucked out by the cold talons of the gale . . . ducks’ heads smouldered . . . luminous, seething . . . burning . . . hissing. (1967, 78)

Throughout the text, nuclear terror laces perception and description: snipe “burn slowly, flicker, then slowly fade” (123); “deep-cut silver burns” wound “long moors of mud” (81); a “huge, red, hostile, floating sun . . . was a globe no longer” (149). In some cases, Baker evokes agricultural intensification and nuclear aftermaths simultaneously—as in the aforementioned “bitter silence . . . slow dying” (137), or in an image of Essex’s “flat land” as a “booming void where nothing lived” (75). For Baker, then, an insistent sense of various nuclear threats, as well as an awareness of pesticide toxicity, impelled a reconfigured literary treatment of the Essex landscape.

Unlike Carson, Baker does not associate fallout with pesticides in an open effort to catalyse protest among his readers. Carson’s primary object in *Silent Spring* was “education in the service of persuasion,” persuasion in turn serving action (Gartner 2000, 120). Her book offers a theory of change, and closes with a hopeful, motivational vision of ecological renewal. By contrast, while *The Peregrine* implicitly protests the poisoning of Essex’s ecosystems, its activism never reaches the level of explicit argument. Rather, Baker crafts a narrator riven by nuclear fear, toxic anxiety, and extinction shame. This project might be understood as a form of literary cartography, using experimental storytelling practices to map affective experiences of a chemically altered world. In this way, Baker anticipates recent scholarly and literary discourses that reveal the toxic legacies of industrial activity, while uneasily acknowledging that “knowledge—cultural, political, ecological—does not necessarily lead to action or change” (Ronda 2018, 110).

“Slow Activism” and *The Peregrine*

The Peregrine ought to be read outside of what Sandra Steingraber (1997, 30) calls “comfortable” historiographies of pesticide regulation. Such historiographies, as Natalie Jas discussed at a 2019 conference, tend to stress the banning of a single type of chemical and the recovery of a certain species in selected contexts, overlooking the ongoing worldwide effects of the use of harmful pesticides. Because of coordinated international activist campaigns, peregrine falcons survived the mid-century organochlorine wave. However, the organochlorine crisis in mid-century Britain should not be interpreted as

a discrete historical episode, long since resolved. It can more accurately be theorized as a local manifestation of structural forces—political, industrial, technological, and ecological—at a particular stage of intersection, and which remain in operation today.

The dispersal patterns of the most dangerous pesticides are shaped by global and local structures of inequality, just as the unevenly distributed harms associated with other toxicants—dioxins, mine tailings, particulate matter—are contoured by histories of social division. DDT is still “illegally used in most of the developing countries,” often alongside other organochlorines, the acutely toxic organophosphorus compounds, and further hazardous pesticides, such as endosulphan (Jayaraj, Megha, and Sreedev 2016, 95–96). In India, for example, “practices of pesticide sale and distribution” are “largely unregulated” (Balayannis and Cook 2016, 537), multinational corporations engage in “aggressive” advertising campaigns, and a “market for ‘spurious’ and ‘adulterated’ pesticides has flourished” (531). Here, “pesticide ingestion is the most popular method of suicide,” with organophosphorus compounds “the most common pesticide for suicide” (538). Angeliki Balayannis and Brian Robert Cook find it is “tempting to attach symbolic meaning to pesticide suicide,” though they ultimately “leave this question to be explored in future research” (539). Between 1994 and 2015 in Colombia, “duster planes sprayed a concentrated formula of Monsanto’s herbicide, glyphosate, over illicit [coca] crops, and also forests, soils, pastures, livestock, watersheds, subsistence food and human bodies” (Lyons 2018, 414). Monsanto’s recent purchaser, Bayer, have been rocked by an “avalanche of legal cases” over allegations that glyphosate is carcinogenic; in June 2020, Bayer agreed to an £8.8 billion settlement with over one hundred thousand US plaintiffs (Giorgadis 2019). In Colombia, compensation claims are systematically rejected—or, as one victim of the poisonings put it, “[m]y dad died of cancer as a result, and who will answer for it?” (Quoted in Yagoub 2017). In 1960s Britain, activists, scientists, and writers sought to craft “arresting stories, images and symbols” of toxicity’s harmful ecological effects in order to capture public attention, and thereby to exert pressure on the state to implement reforms (Nixon 2011, 3). In some of these stories, peregrine falcons played an important role as a “sentinel species” (Gramaglia 2019). As subjects of stories told by relatively powerful groups, the birds were granted a narrative, evidentiary and, ultimately, political significance denied to the majority of today’s “chemically wounded” people (Shapiro 2015, 370).

As Thom Davies has observed, toxic slow violence endures in part because the “arresting” stories about toxicity told by structurally disempowered communities “do not *count* . . . rendering certain populations and landscapes vulnerable to sacrifice and being ‘let to die’” (2019, 13–14). Similarly, Manuel Tironi has discussed how poisoned communities often experience toxicity not through successful mobilization, but rather

“in the rhythm of ordinary corrosion and decay, in the nondescript temporality of chronicity and continuity.” Describing how poisoned communities engage every day in “minute and unspectacular interventions” against these circumstances, he gives careful scholarly consideration to the “actual inventory of doings and responses with which people confront damage and violence” (2018, 440–43). Tironi, Max Liboiron, and Nerea Calvillo have given a name to these rhythms, interventions and doings: “slow activism” (Liboiron, Tironi and Calvillo 2018, 341).

Importantly, Baker was not exposed to the same levels of toxic risk as the communities I discuss above. Even so, *The Peregrine* might be conceived of as literary “slow activism,” committed to finding a language to record, and implicitly to resist, indelibly poisoned circumstances (Liboiron, Tironi, and Calvillo 2018, 341). As Farrier has suggested, it is an account of what Roger Bradbury calls a “zombie ecosystem,” “neither dead nor truly alive in any functional sense, and on a trajectory to collapse within a human generation” (Farrier 2015, 744; Bradbury 2012). Baker reckoned ethically and imaginatively with a transformative toxic regime that seemed to defy resolution, mediating ecological trauma—and thereby helping his contemporary and future readers to process it. Such difficult representational work, it is worth noting, can only complement the pursuit of political and technical solutions.

Conclusion

Certain contemporary literary works recognize that environmental anxiety has set in as an “abiding psychic condition,” responding with a “new poetics” (Ronda 2018, 100, 107). Margaret Ronda has described how some such texts dwell melancholically on ecocide as a “loss that defies resolution” (104). Others probe the “inadequacies of melancholic response, articulating shared political commitments” (Ronda 2018, 107). This latter strain—for example, Kerri Arsenault’s 2020 *Mill Town*, which describes the cumulative toxification of a working-class town in Maine over several decades—tend not to offer the “pastoral promise” of ecological renewal that underpins calls to action in early environmentalist jeremiads like *Silent Spring* (Ronda 2018, 111). Rather, such texts, which *The Peregrine* anticipates, acknowledge industrial chemistry’s irreversible influence, aiming to develop ways of dealing imaginatively with debilitating social and geophysical transformations. *The Peregrine* is an early work in a still-evolving literary discourse about toxic slow violence. It tends towards elegy more than activism, and conducts a sustained post-pastoral enquiry into a mind pervaded by industrial toxicity, saturated in “species shame” and “stalked by ecosystemic memory” (Macfarlane 2017, 195; Gibb 2015).

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